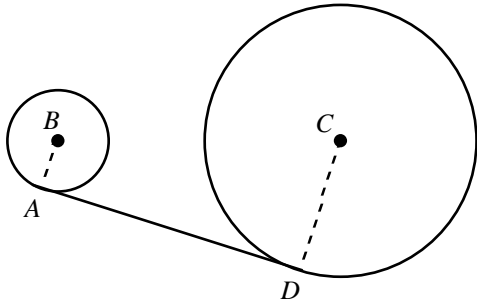


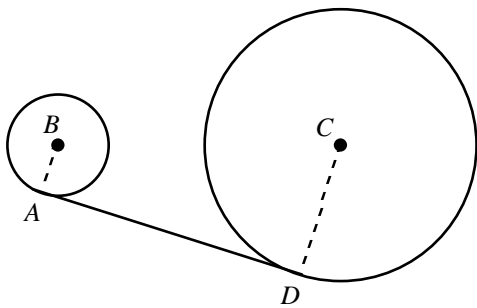
NAME: \_\_\_\_\_

1.  $\overline{AD}$  is tangent to both circles in the figure (not drawn to scale). If  $BA = 9$ ,  $AD = 23$ , and  $CD = 17$ , find the length of  $\overline{BC}$  to the nearest tenth.



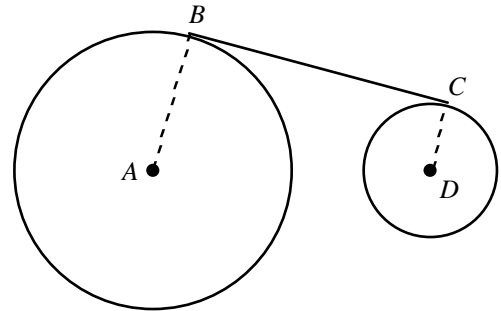
- [A] 32.5 [B] 18.8 [C] 24.7 [D] 24.4

2.  $\overline{AD}$  is tangent to both circles in the figure (not drawn to scale). If  $BA = 7$ ,  $AD = 25$ , and  $CD = 13$ , find the length of  $\overline{BC}$  to the nearest tenth.

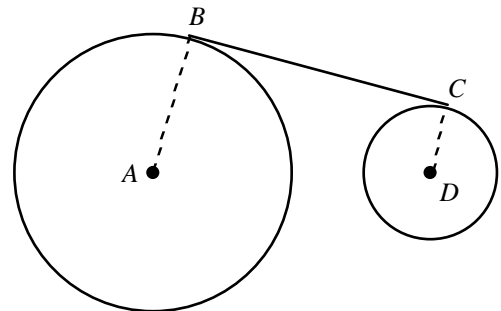


- [A] 14.3 [B] 26 [C] 35.4 [D] 25.7

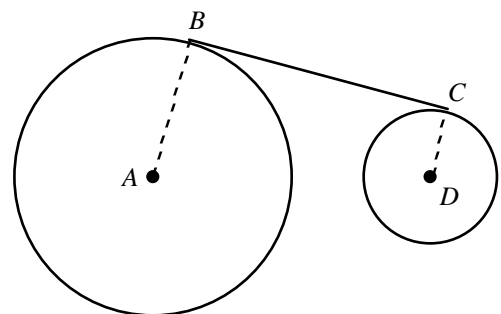
3.  $\overline{BC}$  is tangent to  $\odot A$  at  $B$  and to  $\odot D$  at  $C$  (not drawn to scale). If  $AB = 12$ ,  $BC = 18$ , and  $DC = 3$ , find the length of  $\overline{AD}$ , to the nearest tenth.



4.  $\overline{BC}$  is tangent to  $\odot A$  at  $B$  and to  $\odot D$  at  $C$  (not drawn to scale). If  $AB = 10$ ,  $BC = 16$ , and  $DC = 4$ , find the length of  $\overline{AD}$ , to the nearest tenth.



5.  $\overline{BC}$  is tangent to  $\odot A$  at  $B$  and to  $\odot D$  at  $C$  (not drawn to scale). If  $AB = 9$ ,  $BC = 19$ , and  $DC = 3$ , find the length of  $\overline{AD}$ , to the nearest tenth.



[1] D

[2] D

[3] 20.1

[4] 17.1

[5] 19.9